

The other flowers which I have observed probably are insect-pollinated. I have studied five species of beetles on *Verticordia luegelii*, but none of them were pollinating, as no pollen was attached to their surfaces.

All the mechanisms described are unique to Australian plants, so far as I know. But though I have observed plants for nearly two months in Western Australia I have not seen pollinators on the described species. I should appreciate it very much if readers, who might have observations of pollinators on the above mentioned species, would tell me by writing to the *W.A. Naturalist*.

I also would be happy, if I could have information on pollinators on the following plants:

Isopogon formosus

Pixie Mops (*Petrophile linearis*)

Long-leaved *Petrophile* (*P. longifolia*)

Fringe-Lily (*Thysanotus multiflorus*)

Hybanthus calycinus

Yellow Buttercups (*Hibbertia hypericoides*)

Woodbridge Poison (*Isotoma hypocrateriformis*)

Audersonia caerulea

Milkflower (*Conosperma virgatum*)

Boronia ternata.

REFERENCE

KEIGHERY, G. J., 1975. Parallel evolution of Floral Structures in *Darwinia* and *Pimelea*. *W. Aust. Nat.*, 13 (2/3):

Note: I thank Mr Keighery for telling me that *Conospermum* has an explosive mechanism.

NOTES ON THE BIRDS OF PELSART ISLAND, ABROLHOS

By RAY GARSTONE, Woodanilling

The following notes were made during a visit to Pelsart Island, in the Southern Group of the Abrolhos Islands, between October 26 and 31, 1977.

Within an area from 0.5 km south of the guano jetty to 0.5 km of the southern end of the island there is an expanse of coral sand where vast numbers of sea-birds nest. The whole of this area is occupied by mainly three species which nest close together in a three-tiered society. The Common Noddies nest on the top of the bushes, the Sooty Terns underneath on the ground, and the Wedge-tailed Shearwaters in burrows beneath the surface. The Lesser Noddies, the other main breeding species, nest separately 2 km north of this area, in the mangroves. These four species occur in great numbers. At first sight there are masses of birds streaming in from many directions to form a vast swarm over the breeding area. The majority of the wheeling birds are Sooty Terns, in contrast to the Noddies, which just fly in and out, being content to sit quietly on the bushes. This wheeling swarm never seemed to vary all day long.

Giant Petrel, *Maeronectes giganteus*.—The remains of two birds were found.

Wedge-tailed Shearwater, *Puffinus pacificus*.—Many birds were seen over the sea to the east of the island. Although many burrows were noted north of the guano jetty most were south of it. Most burrows had been excavated, with a few adult birds in occupation during the day. At dusk the bulk of the birds started to arrive and soon great numbers were skimming silently over the vegetation before alighting at their chosen spots.

Little Shearwater, *Puffinus assimilis*.—Three birds with white bellies, seen from the boat flying over the sea to the east of the island, were presumably of this species.

Wilson Storm-Petrel, *Oceanites oceanicus*.—Three birds observed at sea east of the island.

White-faced Storm-Petrel, *Pelagodroma marina*.—A few birds were flying over the bushes at night.

Australian Gannet, *Morus serrator*.—A single bird seen to the east of the island.

Pied Cormorant, *Phalacrocorax varius*.—A flock of 50 birds were on a sand spit; other odd birds were seen.

Red-tailed Tropic-bird, *Phaethon rubricauda*.—The remains of one bird were found on the beach.

Reef Heron, *Egretta sacra*.—At least six were seen mainly near the mangrove lake area.

Grey Teal, *Anas gibberifrons*.—Twelve birds were on the salt lakes.

White-breasted Sea-Eagle, *Haliaeetus leucogaster*.—At least six birds were seen; four adults and two juveniles.

Osprey, *Pandion haliaetus*.—Six nests, most with large young; some fledged. One nest had eggs.

Banded Landrail, *Rallus philippensis*.—A single bird seen at the edge of the mangrove lake.

Australian Spotted Crane, *Porzana fluminea*.—A single bird at the edge of the mangrove lake.

Spotless Crane, *Porzana tabuensis*.—A common bird in the scrubs, but much more numerous in the mangroves.

Sooty Oystercatcher, *Haematopus fuliginosus*.—One bird seen.

Pied Oystercatcher, *Haematopus longirostris*.—Numerous, many in pairs.

Red-capped Dotterel, *Charadrius ruficapillus*.—Several birds seen on the salt lakes.

Large Sand-Dotterel, *Charadrius leschenaultii*.—Odd birds seen.

Grey Plover, *Pluvialis squatarola*.—Up to eight birds seen together.

Black-tailed Godwit, *Limosa limosa*.—A single bird in company with the next species.

Bar-tailed Godwit, *Limosa lapponica*.—Five birds seen on the various salt lakes.

Common Sandpiper, *Tringa hypoleucos*.—One bird on a salt lake.

Greenshank, *Tringa nebularia*.—Two seen on salt lakes.

Grey-tailed Tattler, *Tringa brevipes*.—Small groups of up to six birds seen.

Turnstone, *Arenaria interpres*.—Very numerous along all shorelines and salt lakes.

Great Knot, *Calidris tenuirostris*.—Six birds seen on a salt lake.

Sanderling, *Calidris alba*.—One seen.

Curlew Sandpiper, *Calidris ferruginea*.—Five birds on shorelines and salt lakes.

Red-necked Stint, *Calidris ruficollis*.—Small groups along shorelines and around salt lakes.

Sharp-tailed Sandpiper, *Calidris acuminata*.—Three birds seen.

Avocet, *Recurvirostra novaehollandiae*.—Six at the northern end of the island.

Oriental Pratincole, *Glareola maldivarum*.—A single bird with a white rump flew past along the shoreline in the evening. Next day the bird was observed several times. Wary and difficult to approach it flew in a typical pratincole manner, alighting well up on the beach to hide among the weed. The deeply forked tail, the brilliant white rump, white abdomen, facial markings and short legs, were noted.

Pacific Gull, *Larus pacificus*.—A few pairs were well spaced out along the island. Old nests were seen and two pairs had runner chicks.

Silver Gull, *Larus novaehollandiae*.—There were not more than 50

birds at the southern end of the island. A few had nests with eggs, some with small young.

Caspian Tern, *Hydroprogne caspia*.—A few pairs well spaced. Two pairs had runner chicks; one with a newly hatched young.

Roseate Tern, *Sterna dougallii*.—Small groups and odd pairs; some birds carrying fish; some courtship display observed.

Crested Tern, *Sterna bergii*.—A group of 20 pairs were just starting to nest on the beach near the settlement. About 700 pairs were nesting at the north end of the island—most nests contained one egg, a few with small young (P. Fuller).

Fairy Tern, *Sterna nereis*.—Small flocks were seen feeding offshore on the east side of the island. A group of 20 pairs were just starting to lay in serapes in the coral; four nests were seen, three with one egg, one with two eggs.

Sooty Tern, *Sterna fuscata*.—Thousands of birds were nesting under the bushes in the settlement area. On October 26 eleven nests were found; however by October 30 eggs were everywhere. Nests were merely serapes in the ground, often less than a metre apart. One egg in each nest. King Skinks ate many of the eggs. Birds were continually flying in from the north, particularly on the late afternoon of October 27 when thousands were moving in.

Bridled Tern, *Sterna anaethetus*.—A group of 30 birds were resting on the coral near the mangroves.

Common Noddy, *Anous stolidus*.—Large numbers were present, generally south of the Sooty Tern area. However some groups intruded well into the Sooty Tern colony, and a few Sooties nested right through the Noddy Terns' area also. Nest sites varied from serapes in the ground, on the samphire, and on the top of bushes. The birds nesting in the samphire were packed close together; the others were much more spread out. Many birds were continually flying in with seaweed in their beaks to build onto their nests. No eggs were found until October 30 when 21 nests were seen, each containing one egg. Although the birds came in and out from all directions the largest concentrations were to the east. Masses of birds constantly moved in and out, sometimes settling on the water in rafts. Apart from a soft growling, grunting noise the birds were incredibly quiet.

Lesser Noddy, *Anous tenuirostris*.—Large numbers of birds were building nests in the mangroves. They started flying out early in the morning, flying southwards. They gradually reversed their flight at mid-afternoon, flying back to the mangroves. Most nests were almost complete, with many of the birds sitting on them ready to lay. Confiding and very quiet, their soft calls sounded more like small frogs than birds. This species, too, picked up weed from the beach, often scooping weed from the sea when in flight.

Welcome Swallow, *Hirundo neoxena*.—Pairs seen over most of the island.

Western Silvereye, *Zosterops gouldi*.—A very common bird all over the island, favouring the scrubs.

NOTES ON RAINBOW BIRDS AND FAIRY TERNS ON ROTTNEST ISLAND

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Rainbow Bird, *Merops ornatus*

On 9 December 1977 a pair of Rainbow Birds was first observed on Rottneet Island. The birds sat regularly on fence wires and in trees in the reafforestation plot just east of lighthouse hill. They were seen on 14 December when we left the island, and were seen on the next visit